

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
Exemption, general	<p>Exempt from rule:</p> <ul style="list-style-type: none"> -aerosol cans subject to Reg 8 Rule 49 - electronic components 2/3/93 - assembled printed circuit boards 2/3/93 - paper-fabric-film coating which comply with Reg. 8 Rule 12 - stencil coatings subject to Reg 8 Rule 4 - solid film lubricant Reg 8 Rule 4 - test panels subject to Reg 8 Rule 4 - satellite coating subject Reg 8 Rule 4 - Reg 8, Rule 51 Adhesives and Sealants do not apply to aerospace; Dan Belik 2/10/98 - Reg 1, section 110.3 excludes Aircraft 11/3/93 Applies only to aircraft take off and landing per Dan Belik 	<p>Exempt from rule:</p> <ul style="list-style-type: none"> - aerosol coating products <p>Exempt from VOC limit, solvent use and stripping, solvent cleaning and storage, transfer & control equipment requirements:</p> <ul style="list-style-type: none"> -laboratories with R& D, Q/C and testing for production-related operations - temporary making coatings <p>Exempt from VOC limits:</p> <ul style="list-style-type: none"> - translucent coating applied on clear or transparent substrates - recoating of assembled aircraft at rework facilities if original coating formulation is used <p>Exempt from VOC limits & transfer efficiency:</p> <ul style="list-style-type: none"> -incidental corrosion maintenance repair coating operations at military 	<p>Exempt from VOC coating limits, application equip., stripping, cleaning, maskant dip, list of compliant coating used RK, volume of coating used RK, control equip. RK :</p> <ul style="list-style-type: none"> - coatings applied using non-refillable aerosol spray containers - touch-up coating and stencil coatings - prepreg composite materials <p>Exempt from rule:</p> <ul style="list-style-type: none"> - surface cleaning or stripping of aerospace components in equipment subject to 67.6 (degreasers) 	<p>Exempt from rule:</p> <ul style="list-style-type: none"> - aerosol products - coating or cleaning of metal parts, including but not limited to tooling operations that are subject to Rule 74.12 Surface Coating of Metal Parts and Products 	<p>Too numerous to list all exemptions. Examples that may be appropriate that are also included in the district rules.</p> <p>Exempt from rule:</p> <ul style="list-style-type: none"> - aerosol products - touch-up of scratched surfaces or damaged paint or maskant - touch-up of trimmed edges

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
		facilities			
Exemption, low use facility	Exempt from weekly RK: -< 20 gallons per calendar year		Exempt from VOC coating limits, application equip., stripping, cleaning, maskant dip, list of compliant coating used RK, volume of coating used RK, control equip. RK : - coatings that are used in volumes of < 200 gallons per consecutive 12-month period of coatings provided a total of not more than 200 gallons per consecutive 12- month period of all such coatings including touch-up and stencil coatings, containers, and prepreg composite - coatings used exclusively for purposes of research and development, provided that the total is <= 50 gallons per consecutive 12- month period of all such non-compliant coatings	Exempt from rule: - stationary sources that emit I<= 200 pounds or ROC during any rolling period of 12 consecutive calendar months from coatings, thinners, adhesives, stripper, substrate surface preparation, application equipment cleaning, or any other solvent uses associated with coating operations (emissions from degreasing units subject to Rule 74.6.1, 74.6.2 or 74.6.3, and aerosol products are not included) - aerosol products	
Exemption, low use aerospace		Exempt from VOC limit, solvent use and stripping,	Exempt from VOC coating limits, application equip.,		- 757 liters (200 gallons) per year total primers,

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
		solvent cleaning and storage, transfer & control equipment requirements: - < 3 gallons of VOC- containing coating and solvents from aerospace assemble and component coating operation on each and every day of operation	stripping, cleaning, maskant dip, list of compliant coating used RK, volume of coating used RK, control equip. RK : - low usage <50 gallons per consecutive 12-month period of aerospace coating used; does not include touch-up, non-refillable aerosol spray containers, and prepreg composite Exempt from application method: - <= 1 gallon per day of aerospace coating		<i>topcoats, & chemical milling maskants VOC & HAPs</i>

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
Exemption, coating formulation	Exempt from rule: - < 20 gallons per formulation provided that the total is < 200 gallons per year	Exempt from VOC limits: - < 20 gallons per year provided that the total is < 200 gallons per year - adhesives with separate formulation < 10 gallons per year		Exempt from coating limits: - formulations < 20 gallons per calendar year, or - adhesives with separate formulations < 10 gallons per year provided that the total volume of noncomplying coatings (excluding noncomplying adhesives) used does not exceed 200 gallons annually	- 189 liters (50 gallons) per year

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
Exemption, composition	Exempt from reg 8 rule 51: - adhesive and /or sealants products < 20 g/L of VOC	Exempt from RK: - materials that contain < 20 g/L of VOC	Exempt from list of coating used RK, volume of coating used RK, and control equipment RK: - adhesives, sealants and caulking and smoothing compounds, which have a VOC content of < 250 g/L of coating, less water and less exempt compounds Exempt from some maskant dip tank equipment requirements - <= 20 gallons maskant used per consecutive 12- month period - maskant VOC content <= 10% by weight	Exempt from transfer efficiency: - coatings with > 20 g/L ROC	primers, topcoats, chemical milling maskants, strippers, and cleaning solvents with HAP and VOC noncarcinogens < 1.0% or HAP and VOC carcinogens < 0.1 %

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
Exemption, adhesive & sealants	<p>Exempt from rule:</p> <ul style="list-style-type: none"> - adhesives that comply with Reg 8 Rule 4 - high-temperature-curing adhesive bonding primer cured >325°F , application is subject to Reg 8 Rule 4 -spray application equipment with limited access due to visual impairment which require 360° spray-gun nozzle extension, waterborn extreme performance interior top coating, adhesive bonding primers and pretreatment wash primers, textured finish coating <p>Exempt from Reg 8 Rule 51:</p> <ul style="list-style-type: none"> - adhesive and /or sealants products < 20 gallons per year 		<p>Exempt from list of coating used RK, volume of coating used RK, and control equipment RK:</p> <ul style="list-style-type: none"> -adhesives and sealants which are applied outside application stations required to have a district permit - also see Exemption, content 		

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
Exemption, maskant			Exempt from some maskant dip tank equipment requirements - <= 20 gallons maskant used per consecutive 12- month period - maskant VOC content <= 10% by weight		
Exemption, surface cleaning		Exempt from VOC limit, solvent use and stripping, solvent cleaning and storage, transfer (application), & control requirements: - laboratories with R& D, Q/c and testing for production-related operations - temporary making coatings Exempt from solvent & stripping limits: - surface cleaning of solar cells, fluid systems, avionic equipment, and laser optics	Exempt from rule: - surface cleaning or or stripping of aerospace components in equipment subject to 67.6 (degreasers)	Exempt from surface cleaning: -cleaning of aerospace assembly and subassembly surfaces that are exposed to strong oxidizers or reducers such as nitrogen tetroxide, liquid oxygen or hydrazine	
Exemption, stripper	Exempt from rule: - Tank-type stripper	- see exemption surface cleaning	Exempt from rule: - surface cleaning or		

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
	employing a sealing fluid at least four inches in depth which floats on the stripper surface and which consist of water or a fluid with a true vapor pressure of < 10 mm Hg (0.19 psia) at actual temperature		stripping of aerospace components in equipment subject to 67.6 (degreasers)		
Exemption, transfer efficiency	<ul style="list-style-type: none"> - surface areas with limited access due to visual impairment which require 360° spray-gun nozzle extension - waterborne extreme performance interior topcoats - adhesive bonding primers and pretreatment wash primers - textured finish coat 	<p>Exempt from VOC limits & transfer efficiency:</p> <ul style="list-style-type: none"> - incidental corrosion maintenance repair coating operations at military facilities <p>Exempt from transfer efficiency:</p> <ul style="list-style-type: none"> - touch-up and stencil coatings - marking coatings - airbrush operations 	<p>Exempt from application method:</p> <ul style="list-style-type: none"> - air brushes with a capacity of 3 ounces or less - <= 1 gallon per day of aerospace coating 		

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
Applicability	<p>surface preparation and coating of aerospace components and cleanup of aerospace coating equipment</p> <p><u>aerospace component</u> is the fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle including aerospace prototype or test model</p> <p>coating, solvent evaporative loss minimization, stripper, maskant for chemical processing (includes chemical milling, anodizing, aging, bonding, plating, etching, and other chemical operations) spray application equipment, control equipment alternative</p>	<p>any operation associated with the manufacturing and assembling products for aircraft and space vehicles</p> <p>affected industries include commercial and military aircraft, satellite, space shuttle and rock manufacturers and their subcontractors</p> <p>maskant applicators, aircraft refinishers, aircraft fastener manufacturers, aircraft operators, and aircraft maintenance and service facilities</p> <p><u>aerospace component</u> is the raw material, partial or completed fabricated part, assembly or parts, or completed unit of any aircraft or space vehicle and includes integral equipment such as models, mock-ups, prototype, molds, jigs, tooling,</p>	<p>coating, masking, bonding, and paint stripping of aerospace components in operations where aerospace coating are used, to surface cleaning related to these aerospace coating operations, and to the cleanup of application equipment associated with these operations</p> <p><u>aerospace component</u> means any raw material, partial or completed fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle, including mockups, test panels and prototypes</p>	<p>manufacturing, assembling, coating, masking, bonding, paint stripping, and surface cleaning of aerospace components and the cleanup of equipment.</p> <p><u>aerospace component</u> means any raw material, partial or completed fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile, or space vehicle, including mockups and prototypes</p>	

Identification of Achievable Performance Standards

Source Category: Aerospace Assembly and Component Coating Operations ^(a)

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG NESHAP 9/15/95
		hardware jackets, and test compounds.			
Applicability	adhesive, coating, maskant, cleaning & stripping	adhesive, coating, maskant, surface cleaning, equipment cleaning, stripping, fastners	adhesive, coating, maskant, surface cleaning, equipment cleaning, stripping, fastners	adhesive, coating, maskant, surface cleaning, equipment cleaning, stripping, fastners	adhesive, coating, maskant, surface cleaning, equipment cleaning, stripping, fastners
Comments	VOC does not exempt PCE	VOC exempts PCE	VOC exempts PCE	ROC does not exempt PCE	NESHAP HAP does not exempt VOCs such as PCE, MeCl, TCA

AERO2_1.WP6

^(a) CTG, draft dated July 1996; proposed 10/29/96; 61FR55842
NESHAP 9/15/95, effective 9/15/98 for existing sources (contains HAP & VOC emission limits)